

IN THE CLAIMS

Claims 1-7 **(canceled)**.

Claim 8 **(currently amended)**: An embedded centrifugal cooling device, comprising:

a centrifugal fan including a rotary shaft and a plurality of blades; and

a heat sink, including a plurality of first cooling fins and a plurality of second cooling fins, wherein an annular cavity is defined between the first cooling fins and the second cooling fins, and the second cooling fins include a lower portion; and

D2 ~~a centrifugal fan, formed in said annular cavity so as to be embedded into said heat sink~~
wherein the blades are located in the cavity, and the rotary shaft is located above the lower portion of the second cooling fins.

Claim 9 **(previously presented)**: The embedded centrifugal cooling device according to claim 8, further comprises a cover formed on said heat sink and said centrifugal fan.

Claim 10 **(original)**: The embedded centrifugal cooling device according to claim 8, wherein said cover serves an air seal to keep airtight.

Claim 11 **(previously presented)**: The embedded centrifugal cooling device according to claim 8, wherein said annular cavity matches said centrifugal fan.

Claim 12 **(previously presented)**: The embedded centrifugal cooling device according to claim 8, wherein said cooling fins are distributed under and around a region extending from a central region of said centrifugal fan to a periphery of said centrifugal fan.

Claim 13 **(original)**: The embedded centrifugal cooling device according to claim 8, wherein said heat sink is made of a material chosen from the group consisting of aluminum, aluminum alloy, copper, copper alloy and the combination thereof.

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Claim 14 **(currently amended)**: An embedded centrifugal cooling device, comprising:
a heat sink, including a plurality of first cooling fins and a plurality of second cooling fins, wherein a cavity is defined between the first cooling fins and the second cooling fins, and the second cooling fins include a lower portion;

a cover connected to the heat sink; and

a centrifugal fan including a rotary shaft and a plurality of blades, wherein the blades are located in the cavity, and the rotary shaft is connected to the cover and is located above the lower portion of the second cooling fins ~~formed in said cavity so as to be embedded into said heat sink;~~
and

~~a cover formed on said heat sink and said centrifugal fan.~~

Claim 15 **(original)**: The embedded centrifugal cooling device according to claim 14, wherein said cover serves as an air seal to keep airtight.

Claim 16 **(original)**: The embedded centrifugal cooling device according to claim 14, wherein said cavity matches said centrifugal fan.

Claim 17 **(original)**: The embedded centrifugal cooling device according to claim 14, wherein said cooling fins are distributed under and around a region extending from a central region of said centrifugal fan to a periphery of said centrifugal fan.

Claim 18 **(original)**: The embedded centrifugal cooling device according to claim 14, wherein said heat sink is made of a material chosen from the group consisting of aluminum, aluminum alloy, copper, copper alloy and the combination thereof.


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Claim 19 **(currently amended)**: An embedded centrifugal cooling device, comprising:
a heat sink, including a plurality of first cooling fins and a plurality of second cooling fins, wherein a cavity is defined between the first cooling fins and the second cooling fins, and the second cooling fins include a lower portion;

a centrifugal fan having an axial direction and radial directions and including a rotary shaft and a plurality of blades, disposed in said cavity so as to be embedded into said heat sink wherein the blades are located in the cavity, and the rotary shaft is located above the lower portion of the second cooling fins; and

a cover, including a plurality of inlets, disposed on said heat sink and said centrifugal fan, wherein air from ambient is flowed in the axial direction of the centrifugal fan into the heat sink from the inlets of the cover, and is flowed in the radial directions of the centrifugal fan out of the heat sink.

Claim 20 **(previously presented)**: The embedded centrifugal cooling device according to claim 19, wherein said cover serves as an air seal to keep airtight.

Claim 21 (**previously presented**): The embedded centrifugal cooling device according to claim 19, wherein said cavity matches said centrifugal fan.

 Claim 22 (**previously presented**): The embedded centrifugal cooling device according to claim 19, wherein said cooling fins are distributed under and around a region extending from a central region of said centrifugal fan to a periphery of said centrifugal fan.

Claim 23 (**previously presented**): The embedded centrifugal cooling device according to claim 19, wherein said heat sink is made of a material chosen from the group consisting of aluminum, aluminum alloy, copper, copper alloy and the combination thereof.
